

position to which the machine controller locates the machine tool following machine media derived from an engineering specification of a part exceeds a predetermined offset threshold,

wherein the software controller uses a standard deviation protocol to determine the rest position when the machine tool ~~tops~~ stops following movement.

REMARKS

Claims 1 – 9 are pending in this application following this amendment. Applicant believes that the Examiner will find the claims to be in condition for allowance upon further consideration and examination.

Applicants amend the claim of priority to correct a typographical error and correct a misspelling in claim 1.

Applicant respectfully traverses the rejection of claims 1 - 9 under § 102 as being anticipated by US Patent 5,129,044 (*Kashiwagi*). *Kashiwagi* discloses the control of the position or force of a machine tool or robot end effector having at least two degrees of freedom using two computing device to overcome problems associated with the “virtual compliance control method.” In contrast, the present invention is computer software for providing trickle feed repositioning commands to a machine controller to correct for position error. The machine controller responds to motion commands generated in response to a digital definition representing a part. Accuracy of the machining, however, is improved by measuring the true position of the machine tool’s end effector after executing such part definition motion control and the intended position using an independent measurement system, a laser tracker. *Kashiwagi* does not involve trickle feed or repositioning commands of the nature claimed for comparing the commanded position and the true spatial position. In that regard, the present invention involves a software control to improve machine accuracy by accounting for changes in a machine due to wear or factory conditions. Because the reference lacks claimed features of the present invention, anticipation is not a proper ground for rejection.

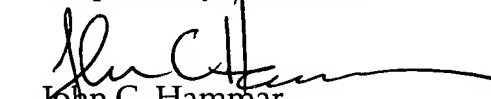
Kashiwagi does not use least squares fit algorithms.

Kashiwagi does not provide trickle feed delta correction commands when a comparison of the true position exceeds a predetermined offset threshold. That is, within a certain tolerance, some position errors are tolerated because achieving absolute accuracy can be slow, if it can be achieved at all.

Kashiwagi does not record the correction commands for later analysis of machine wear.

The *Kashiwagi* software controller does not use a standard deviation protocol to determine the rest position when the machine tool stops.

Respectfully submitted,



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